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# ANALYZING THE EXTERNAL SOCIAL CAPITAL OF FAMILY FIRMS

*Running title: Analyzing the external family social capital*



## **ABSTRACT**

We examine an important yet overlooked aspect in research on social capital: the familial bonding that interorganizational relations may hold. We argue that the social identity of a family member is likely to reframe how they behave within social relations and towards actors outside the firm that are within or not within the family, changing the conditions for trust, knowledge exchange, and value creation. Drawing on a family and nonfamily classification of interorganizational relations, we examine: 1) theoretically and empirically the extent to which relationships with family members located in other related firms, which we define as external family social capital (EFSC), affect firm performance; (2) its interaction with relationships with members of other firms not bearing a family connection, referred to as external organizational social capital (EOSC); and (3) the varying levels of trust required to extract value from EFSC and EOSC.

Keywords: Family social capital, family firm, organizational social capital, social networks, alliances.

## INTRODUCTION

It is widely known that social relations are vehicles for exchanging important knowledge having positive implications for organizational performance, and this represents one of the cornerstones of research into social capital (Nahapiet and Ghoshal, 1998). As social relations develop to bear social capital, the trust that forms among social partners reinforces the positive effects of these relations on the exchange and combination of knowledge relevant for the organization. When ties and their associated social capital gain trust, not only is more productive knowledge transferred but its transmission occurs with fewer errors (Sorenson et al., 2006). Nevertheless, we contest that the current depiction of why and in what ways social relations might be productive vehicles for the exchange of knowledge capable of positively affecting organizational performance is oversimplified, because researchers have treated interorganizational relations equally, when in fact these could be of very different nature.

One such substantially different aspect is the family feature: whether these interorganizational relations have a family bonding or not. When interorganizational relations bear a familial characteristic, mechanisms about trust and reciprocity and what it means to have exchange or social capital bonds between or among actors are likely to be very different than between two otherwise random connected actors. Arregle et al. (2007) posited that family firms are unique in that they possess at least two forms of social capital, family social capital and firm social capital. These authors' point of departure was that a firm is not necessarily internally homogenous such that different social groups within the firm (in this case a family group and a non-family group) can affect how productive functional relationships are formed within the firm. Zahra (2010) also proposed the existence of such familial social capital, but expressed that while useful to the functioning and maintenance of the firm, familial social capital might not necessarily create value for the firm in comparison to the firm's external social capital with other organizations. Arregle et al. (2007) and Zahra

(2010) treat family social capital as an intraorganizational phenomenon, leading to the view that while family social capital might help build external firm social capital, ultimately that external firm social capital is more valuable because it enables the firm to acquire knowledge and resources outside its borders. Yet, such a view ignores the fact that family businesses can capitalize on family relationships *outside* the traditionally-defined boundaries of the family firm (Anderson et al., 2005), by drawing on relationships with family members located in other related firms. These relations provide a new category of social capital, which we have defined as external family social capital (EFSC).

In reality, social relations among firms are held at the individual level (Zaheer et al., 1998). Transcending a monolithic view of organizations (Pfeffer, 1982) to examine individual boundary spanning actors (Katz and Kahn, 1978) is therefore necessary to understand how trustful, valuable relations emerge among firms (Fang et al., 2015; Prashantham and Dhanaraj, 2010) with the potential to affect their performance frontier in competitively advantageous ways (Barney and Hansen, 1995). The family firms literature has long argued that family businesses have competitive advantages over nonfamily businesses but explanations for this difference is unclear (Hoffman et al., 2006; Patel and Fiet, 2011) and confusing (Chua et al., 1999), but might be better understood when looking at the family social system (Habbershon et al., 2003). Individual family members are an essential element of this social system and the family unit can provide the foundation for moral behaviour, the guidelines for cooperation and coordination, and the principles for reciprocity and exchange (Arregle et al., 2007; Bubolz, 2001) on which trust depends. Social identity theory (SIT) can help to explain this phenomenon (Deephhouse and Jaskiewicz, 2013).

We argue that the social identity associated with family and family ties has important implications for organizational behaviour, holding the potential to question and change our prior assumptions about social capital and about accruing benefit or value from social

relations. For example, the nature of trust and the magnitude of response to any call for information or assistance are likely to be very different among family members than with nonfamily members, with the need for trust being less relevant and a sense of obligation to act regardless of any likelihood of reciprocity overruling reticence. This social identity is connected to the socio-emotional wealth of family firms, understood as the non-financial aspects that meet the family affective needs, such as identification of the family with the firm or family influence (Gomez-Mejía et al., 2010), and their motivation to protect such affective endowments (Deephhouse and Jaskiewicz, 2013, Haynes et al., 2015). At the heart of family social capital then is a moral infrastructure of norms, obligations, and expectations about how family members should behave and relate to one another (Sorenson and Bierman, 2009; Sorenson et al., 2009). This provides an almost automatic cognitive dimension to family social capital that would otherwise need cultivating within more traditional business actor relationships (Nahapiet and Ghoshal, 1998). Trust in family members is far less a “leap of faith” compared to trusting nonfamily actors (Zaheer et al., 2007, p.143), but even without any future reciprocity from a family member, trust is unlikely to diminish or expectations not acted on because of the sense of familial obligation. Thus, the need for relational trust and dispositional trust in social relations are likely to be substituted by other mechanisms.

SIT holds that people tend to classify themselves and others into various social categories that contain schemas and prototypical characteristics abstracted from and about its members (Ashforth and Mael, 1989; Turner, 1985). These classifications cognitively segment the social environment, providing an individual with the means to define others and develop a set of working expectations (or stereotypical expectations) about them (Ashforth and Mael, 1989). Normally, such stereotypes are not necessarily reliable (Hamilton, 1981) unless there is relative closeness to the social classification in question. Drawing on a simple family and nonfamily classification, individual family members located outside a focal firm but with

family ties to that firm carry a much higher social identification and consequently not just a prototypical or stereotypical set of characteristics, but a set of formal and longstanding moral guidelines, expectations, and obligations in how they interact with other family members regardless of their location (i.e., within or outside the boundaries of the family firm). Thus, the social identity of a family member is likely to reframe how they behave within social relations and towards actors outside the firm that are within or not within the family, changing the conditions for trust, for knowledge exchange, and value creation.

Drawing these themes together, we argue that the literature on social networks and social capital has failed to account for network context in a manner that may lead it to make false assumptions and predictions about the value of social relations to firms. It is long appreciated that examining networks structure without network content is insufficient to understand what value might accrue to firms and why (Koka and Prescott, 2002; Rodan and Galunic, 2004). But to fail to consider the context of different networks of social relations (in this case, family and nonfamily ties) risks inserting fundamental flaws into our understanding of the operation of social relations, knowledge exchange, and value creation.

We therefore seek to answer the following research questions: To what extent does external family social capital (EFSC) affect firm's performance? Do EFSC and external organizational social capital (EOSC) interact with each other? And, do these two types of external social capital require the same amount of trust to extract value from the relation? In answering these research questions we offer three important contributions to the literature. First, we suggest a new type of category within external social capital: external family social capital and we connect it with firm's performance. We argue that through family organizational social capital, family firms can use their family contacts to connect with other companies to gain the knowledge necessary to stimulate their activities and developing revenue streams that generate profits and growth. These activities also safeguard against

conservatism that can plague some family firms. Second, we elaborate on the distinction of these two forms of external social capital: family versus organizational, exploring their complementary effects on firm's performance. Third, by examining the distinct moderating effect that trust may have on the relationship between EFSC, EOSC, and performance, our study signals the importance of social identity over other relational characteristics (such as trust) in extracting value from interorganizational relations. Our study responds to calls by Arregle et al. (2007), Sorenson et al. (2009), and Zahra (2010), among others, for examinations into the interactions of family firms with different groups of social actors in ways that might create competitive advantages, contributing to our collective understanding of family firm competitiveness and the role of social relationships in the creation of value. Other authors, such as Zamudio *et al.* (2014), have noted the importance of studies on the links between performance and intra and inter-firm networks.

## **THEORY**

### **Social Identity Theory**

Social identity is the part of an individual's self-concept which stems from their knowledge of their belonging to a social group together with the value and emotional significance embedded into that membership (Tajfel, 1978, 1982). It leads to activities that are congruent with the identity and to behaviour that is based on perceptions of intra-group similarity (Ashforth and Mael, 1989). Individuals belonging to a social group have some behavioural expectations based on the social categories of an identity standard they represent within the group.

Social identity theory (SIT) holds that individuals form and classify themselves into social categories as a way of defining prototypical characteristics abstracted from the members (Turner, 1985) and new 'members' are then assigned these prototypical



characteristics as a way of setting predictions and expectations about their likely behaviours (Ashforth and Mael, 1989), regardless of how inaccurate or unreliable these might be (Hamilton, 1981). These classifications enable individuals to make sense of their social environment and define themselves in relation to others (Deephouse and Kaskiewicz, 2013). Thus, such construction of social identity groupings might be thought of as uncertainty-reducing mechanisms set within a pretext for belonging.

SIT is more complex than this, however, and such a reductionist view masks the implications of social identity classifications for how individuals approach and behave towards others, as well as the system of expectations and constraints around that. Apart from generating stereotypes for social identity groups about expected characteristics and behaviours, social identity groupings also enable individuals to locate and define themselves (Ashforth and Mael, 1989). Within SIT then, an individual's self-concept contains their personal identity and social identification as a perception of their oneness or belongingness to a larger aggregate of people (Ashforth and Mael, 1989). The comparison is a relative one (Tajfel and Turner, 1985). Although not always the case, identity in this instance contains evaluations and expectations about effort (behaviour) and loyalty (affect) (Tajfel, 1978). It is at this juncture where the theory becomes highly relevant to understanding the potential scope of behaviour by family members located outside a family group and contained within another organization.

### **SIT and Family Firms**

Themes and constructs contained within SIT have already been inadvertently raised and evoked in research on family firms' social capital and research into familial relationships. For example, themes such as 'the family point of view' (Sorenson et al., 2009), moral infrastructure (Hoffman et al., 2006; Sorenson and Bierman, 2009; Sorenson et al., 2009),

moral behaviour (Arregle et al., 2007; Bubolz, 2001), the social capital of familiness (Sharma, 2008), family members' embeddedness in entrepreneurial networks (Anderson et al., 2005), and ideas of family norms (Hoffman et al., 2006) in some shape or form evoke the image of the family as a social group. Contemporary research has also applied SIT directly to describe the strength of family members' identification with a family firm, relative to non-family members in similar positions at family or non-family firms, and the rewards that may bring (Deephouse and Jaskiewicz, 2013). In SIT, it is posited that social identification is a perception of the cohesion and unity of a group of people that can be categorized around a social identity, and that group social identity in some shape or form exhibits a particular distinctiveness and even prestige (Ashforth and Mael, 1989). Importantly, this social identification leads to behaviors that would be expected to be congruent with the social identity and support institutions, norms, expectations, and obligations (unwritten) that embody membership of that identity group (Ashforth and Mael, 1989). From the perspective of a familial social identity, stereotypical and prototypical characteristics are likely to be far more concrete, shaped by norms, expectations, and obligations set out by codes of moral infrastructure and behaviour within the family unit. Importantly, research in social psychology finds that when individuals identify with a particular social group, they tend to act in favour of these 'in-groups' (e.g., Tajfel et al., 1971; Turner et al., 1979). The moral infrastructure of a family unit is made up of a set of beliefs about family, business, and the community, in which it sits, specifying how these entities should relate to one another (Hoffman et al., 2006). In a family firm sense, as interactions among family members, business, and wider individuals in the community outside its boundaries develop and grow over time, expectations about anticipated and acceptable behaviours, norms, beliefs, and obligations within the family are internalized within its social group. When families go on to

establish businesses, the beliefs and norms internalized within the family group would be expected to carry over into the businesses they form (Sorenson et al., 2009).

There are clear parallels in the emergence and development of a group social identity within SIT to the formation of social capital (Adler and Kwon, 2002), primarily because the cognitive component of social capital (shared representations, interpretations, norms, and systems of meaning informing what is expected during cooperative behaviour) (Nahapiet and Ghoshal, 1998) overarches with the cognitive process of segmentation, classification, and identity-building that takes place when social identity groups form (Ashforth and Mael, 1989).

The family as a social identity group provides a foundation for moral behaviour and sets principles informing the nature of cooperation and coordination among its members (e.g., Arregle et al., 2007). It also sets in place principles of exchange and reciprocity (Bubolz, 2001). These codes, values, and rules are capable of not just surviving generations but also of disseminating and diffusing throughout the wider family unit over time, facilitating further integration, cohesion, and survival (Berger and Luckman, 1967; Bourdieu, 1994). The success to which such norms take hold in part depends on the nature of the collaborative dialogue between family members (Sorenson et al., 2009), but it would be expected that barring any substantial problems, as family relationships continue and increase, the interaction that takes place produces greater expectations about obligatory support, exchange, and reciprocity (Arregle et al., 2007). Stated slightly differently, among family members, greater generosity and inclination to provide support even in distant family relationships would be expected (Bourdieu, 1994). Family firms might then have a greater initial stock of social capital than a typical firm and that social capital would be at less risk of decay (e.g., Prashantham and Dhanaraj, 2010).

## **Social Capital and its Forms in Family Firms**

Social capital consists of the reciprocal relationships between individuals and organizations that facilitate action and create value (Adler and Kwon, 2002). However, these relationships are ultimately at the individual level, between an actor in one firm and an actor in another, but bear relevance for an organizational-level outcome, namely performance (Zaheer et al., 1998). Some authors have described social capital in terms of internal relationships within firms (Coleman, 1990), whereas others have been mainly focused on external links (Burt, 1992). More recently, Adler and Kwon (2002) classified social capital as bridging (external focus) and bonding (internal focus) social capital. However, there is not a clear classification of social capital in the literature.

For family firms, a broadly accepted classification is that social capital falls into two broad categories (Zahra, 2010): Family Social Capital (FSC) and Organizational Social capital (OSC). Family social capital results from the resources and benefits obtained from the relationships and interactions among family members *within* the firm, whereas organizational social capital (OSC) derives from both intra- and inter-organizational relationships (Arregle et al., 2007). Similarly, as a firm's internal social capital is divided into family social capital and internal organizational social capital, we argue that an analogous classification can be made to the external social capital of the firm. Family members within a family firm can capitalize on resources embedded in ties with family members that reside *outside* the boundaries of the firm and located in other firms (Anderson et al., 2005). In other words, family social capital has an external component which is ignored in recent treatment (Arregle et al., 2007; Zahra, 2010). This can be seen in Table 1, where we have drawn a 2x2 matrix leading to four different quadrants. On one axis we have represented the internal (within-organizational ties) or external (inter-organizational ties) nature of social capital. On the other axis we have represented if the social capital is of a kinship type or a non-kin type. The new definition of

social capital we proposed in this work lies in Quadrant 3, which has been largely ignore in the literature, leading to what we defined as external family social capital (EFSC).

Frequently, family firms interact with other family members that are external to their firms but that work in the same type of business. For example, very often upon the death of founders or owners, family firms are split among descendants and we can find several firms stemming from the same family firm that are involved in the same industry. Family owners of these firms and family members hold relationships and communicate with each other sharing knowledge, either explicitly or tacitly, promoting social capital that makes it possible to obtain resources from other companies. Moreover, they would exhibit and share a close if not identical social identity of the family group, rendering a common basis for supporting each other under SIT (Ashforth and Mael, 1989) and social capital theory (Hughes et al., 2014; Nahapiet and Ghoshal, 1998; Yli-Renko et al., 2001). The diffusion of family members into other businesses may also occur as part of ‘spinning out’ into their own ventures wherein family members often act as donors (Arregle et al., 2007) and support start-up (Anderson et al., 2005).

In a somewhat different vein, Zahra (2010) specified the importance of family firms connecting with new ventures as vanguards of radical change to achieve their own long term survival, profitability, and prosperity. Zahra’s (2010) logic can be extended to situations where those new ventures can conceivably be by other family members. But regardless of the origin of any business connection, a family firm is capable of drawing on ties with unconnected others in external organizations for entirely objective business reasons just as they could connect with family members in such external organizations. From a SIT perspective, there might be advantages to doing so because of the family identity and the moral infrastructure that it connects to.

In contrast to a family context, a network of connections with nonfamily actors across a range of business organizations does not carry the same qualities or processes for stability, interdependence, interaction, or commonality (Arregle et al., 2007; Nahapiet and Ghoshal, 1998). But strategic relationships with business organizations can expose the family firm to novel pockets of idiosyncratic knowledge (McEvily and Zaheer, 1999) and heterogeneous resources vital for growth (Hite and Hesterly, 2001), particularly when used in conjunction with the family firm's own resources to innovate new combinations (Sirmon and Hitt, 2003). Diverse relationships in this respect can also expose the family firm to new knowledge and reduce the risk of knowledge redundancy caused when ties exhibit too much overlap or closeness (Burt, 1992). Thus, relationships with nonfamily members in a diverse group of firms can provide a variety of resources and knowledge needed to innovate (Uzzi, 1997).

Taken together, ties with family and nonfamily members in external organizations outside the boundaries of the firm may be capable of presenting different benefits to the family firm. We define the resources obtained from external family links as external family social capital (EFSC), and define external organizational social capital (EOSC) as the resources that result from family firms' interactions, communications and relationships with diverse external nonfamily actors. Therefore, we suggest that external social capital, ESC, (or OSC as defined in Arregle et al., 2007) can be divided into EFSC and EOSC.

### **Trust in Relationships held by Family Firms**

Trust is required for the exchange and combination of knowledge and resources to take place in any set of relationships. Trust in the family firm context might not necessarily fit current conceptualizations of trust, either as dispositional or relational (Zaheer et al., 1998), or contractual (governance-based) or knowledge-based (Gulati, 1995). Trust is important because it reduces opportunistic behaviour and thus reduces transaction costs associated with

exchange which reduces the need for formal and heavily-defined contracts as a governance mechanism (Bromiley and Cummings, 1995; Gulati, 1995; Zaheer et al., 1998). Zaheer et al. (1998) distinguish dispositional trust as an individual's expectancies about the trustworthiness of others and in a family context with a strong social identity, it would be expected that high deference to the family as a symbol of trustworthiness might exist. But trust is also likely to bear a relational component, being based on experience and interaction with an exchange partner. This form of trust is much more likely in relationships with nonfamily actors whereas in a family context might be overruled by the social identity of the family and expectations and norms about obligatory support and reciprocity laid out within its moral infrastructure. There is no absolute certainty of support in either case, but even in the absence of social capital, some obligation may reside from the family social group as an identity in this context.

On the other hand, the inter-actor trust that underpins social capital depends on a behavioural component capturing the degree of confidence exchange partners have in each other's reliability and integrity. The greater the confidence that these expectations will be met reflects knowledge-based trust (Gulati, 1995). Confidence is the predictability that positive expectations about another's behaviour will be met (Ring and Van de Ven, 1992), but also the expectation that an actor can be relied upon to fulfil their obligations without opportunistic behaviour taking place (Zaheer et al., 1998). In a family social group situation, or what Arregle et al. (2007) define as "a group with closure" (p.76), such 'bad' behaviour would incur severe group social sanctions (Portes, 1998). We suggest that the social group identity facilitates a level of commitment that reduces the need for contracts, controls, and oversight procedures in ways that would not be the case in relationships with nonfamily members (Ashforth and Mael, 1989; Coleman, 1988). Thus, in a family context, owing to the dynamics of the social identity at play and the moral infrastructure the family provides within that

context, the need to build trust in the classic and formal sense is likely to be very different, with residual expectations and obligations in place prior to any previous business connection between the two family actors.

## **HYPOTHESES**

Family firms often split and divide over time, either among descendants upon the death of founders or owners, or as family members spin out to form their own business venture. This tendency explains why we can find several firms involved in the same industry stemming from the same family firm. Family owners of these firms can hold relationships through formal or informal ties (Kontinen and Ojala, 2011) and obtain benefits and resources from each other leading to what we have defined as External Family Social Capital. Reports suggest that this type of family tie may represent a quarter of key network external ties (Anderson et al., 2005). According to the definitions the literature has given to bonding and bridging social capital (Adler and Kwon, 2002; Sharma, 2008), EFSC lies between both categories: it may be considered as bonding social capital (as it is derived from within the family) and as bridging social capital (as it stems from sources that are external to the firm).

Family members frequently share knowledge, either explicitly or tacitly, often around family gatherings and occasions, both formal and informal (Sorenson and Bierman, 2009), promoting relational capital that makes it possible for these firms to obtain resources from each other. EFSC is appropriable in the sense that it can be used for other purposes than it was initially thought of or intended for. Through family communication, in formal or informal meetings such as around a family meal family members develop common beliefs about their family and business identity (Sorenson and Bierman, 2009). Furthermore, these relationships can serve as pipes through which firms can access new links to other non-family actors. As this type of family social capital refers to relationships among family members in different



firms but within the same business, the quality and specificity of the knowledge exchanges can be very high and intense, therefore representing a very valuable resource to gain competitive capabilities and therefore superior performance.

According to Barney (1991), to leverage firms' resources and to make the most of them in providing sustained competitive advantages, these resources need to possess four characteristics: they need to be rare, valuable, difficult to imitate and non-substitutable. EFSC feature all four characteristics. Literature has widely asserted that family relationships represent unique resources (Arregle et al., 2007) that play an important role in creating value for firms (Salvato and Melin, 2008), particularly as they maintain a 'family language' which allows them to communicate and share knowledge more efficiently (Tagiuri and Davis, 1996), and because family ties are stronger, more intense and more enduring than non-family ones (Hoffman et al., 2006). Family social capital exists within family relationships and cannot be readily imported or hired (Sorenson and Bierman, 2009). Family relationships have also been found to be inimitable and non-substitutable (Hoffman et al., 2006). We can argue that *blood is thicker than water*.

Obviously, some families may not maintain relationships, as a consequence of family conflict or family rivalry, which may hinder the "sense of identity". These firms would have low or null family social capital and would behave similarly to non-family firms. But these external family ties represent an asset available to some family firms that, as any asset, could be used or not in this case to create external family social capital. We argue that when it is used to produce EFSC, then it is a very valuable resource to be used to gain better competitive advantages.

Nahapiet and Ghoshal (1998), focusing on social networks, pointed at four tie characteristics as the determinants of social capital: stability, interdependence, interaction, and closure. The four of them are strong in family ties. Family relationships tend to endure over a

lifetime and be kept through repeated interaction at informal family meetings, promoting stability and strong interaction (Nahapiet and Ghoshal, 1998). Because a strong social structure already exists around families, family capital is readily available (Hoffman et al., 2006). Kinship relationships also make family members dependent on each other (Arregle et al., 2007) and often families maintain dense networks. Arregle et al., (2007) suggest that as the family evolves, more information exchanges can occur and it is also likely that, as the family circle grows (expanding it further to the firm's borders), the group becomes more heterogeneous germinating new ideas and knowledge (Kellermanns & Eddleston, 2007) leading firms with many links to different family members to gain better competitive advantages resulting in superior performance. Relationships with external family members have been said to provide some extra benefits when compared to IFSC as they provide greater diversity (Anderson et al., 2005) and the conflict derived from the firm-business blurred borders is not present as may occur with IFSC. Resources exchanges through informal networks also transmit norms develop by social identity and social support (Molina and Martínez-Fernández, 2009). This is consistent with research that maintain that having numerous relations gives firms the opportunity to exchange and combine resources more efficiently (Tsai and Ghoshal, 1998). From the above, we suggest:

**H1: The amount of external family social capital is positively associated with firm performance.**

While EFSC is a relevant asset to the firm, being able to manage this unique resource is crucial to obtain the most of its benefits (Sirmon and Hitt, 2003). To leverage EFSC and to obtain the desired advantages from it, a certain amount of firm-specific tacit knowledge is required. Literature has assumed that tacit knowledge is more easily available and shared among family ties than among non-family ties (Sirmon and Hitt, 2003) due to the shared

vision, common language and strong, enduring relationships that family members often hold (Hoffman et al., 2006). However, if the network is focused only on kinship, it can get too homogeneous to provide a range of diverse resources (Anderson et al., 2005). Consequently, a variety of sources is more likely to generate sustainable advantages. It is important that managers do not rely only on family ties but also on acquiring external new and non-redundant resources (Sirmon and Hitt, 2003) to get the most out of the social networks and, consequently, to improve performance (Sorenson et al., 2009). Further to this, some authors (Patel and Fiet, 2011) maintain that managers in family firms are more successful in combining diverse information than managers of non-family firms and that family firms have greater economies of scope in combining diverse information. Therefore, we suggest that the amount of external family social capital exerts not only a direct, but also an indirect effect on performance as it interacts with the benefits that can be acquired through non-family ties.

Consequently, and analogously to what the literature maintains regarding internal family social capital, if a firm does not maintain new forms of relationships outside of their family network, it will experience increasingly redundant knowledge and will lack the variety of knowledge, abilities and skills necessary to reach a rich social capital (Coleman, 1990) capable of rewarding firm performance. This leads us to the following hypothesis:

**H2: The amount of external family social capital and external organizational social capital interact with each other by reinforcing their effects on performance.**

Transferring rich knowledge requires not only time and effort but also trust (Sirmon and Hitt, 2003). In a dyad transferring knowledge two parties exist: the ego and the alter. While trust is key to the ego's willingness to provide knowledge and resources and in order to be open to receive knowledge from the other party, the alter's trust is also relevant as otherwise he or she may be reluctant to share their own resources. Consequently, trust can be

regarded as an attribute of a relationship (Tsai and Ghoshal, 1998) that allows the two parties of a relationship to rely on each other (Hoffman et al., 2006).

Trust has been seen as an antecedent of cooperation (Tsai and Ghoshal, 1998) and it needs to be built over time through intensive relationships. When a firm trust the alter, it becomes more willing to share its resources and information (Tsai and Ghoshal, 1998) and becomes more open to receive knowledge from the other party (McEvily and Marcus, 2005). Interorganizational ties without some level of trust appear to be impossible as these relationships are voluntary (Leana and Van Buren, 1999). Consequently, we argue that for interorganizational relationships to effectively create high levels of organizational social capital, they need high doses of trust, with these relationships being much more effective in cases of high trust ties than in cases of low trust ties. This is particularly relevant for *external* social capital, as the alters not only do not belong to the same firm but may represent a competition for the ego's firm as well.

Trust involves taking risks in order to receive a reward (Leana and Van Buren, 1999), either expecting equal benefits (fragile trust) or unequal benefits (resilient trust). Strong family norms lead to obligations and expectations such as knowledge exchanges among family parties without the need to expect explicit and immediate benefits in return (Pearson et al., 2008), but expecting that the family will work for them when the time comes (Hoffman et al., 2006). Obligations to the family encourage enduring network ties wherever they might reside, which are less likely in nonfamily firms (Pearson et al., 2008). In many family relationships, often they may not expect benefits in return, at least in terms of knowledge transfer (Pearson et al., 2008). In this type of relationship, although they may vary from one family to another (Hoffman et al., 2006), frequently knowledge is given away based on tacit norms, commitment and altruism, due to the family nature of the ties, but not expecting any benefits out of it or in return. Consequently, the literature has assumed that family firms are

rich in resilient trust (Pearson et al., 2008). Family relationships are based on moral infrastructure (Sorenson and Bierman, 2009), defined as the beliefs that family members have about themselves and how they relate to each other (Hoffman et al., 2006). Moral infrastructure implies norms, obligations and expectations that promote family cooperation (Sorenson and Bierman, 2009) without expecting to be paid back in the short term with the same coin, so to speak. Resilient trust has been labelled as knowledge-based trust or generalized trust by some authors. Drawing from Social Identity Theory, we can maintain that generalized trust (Leana and Van Buren, 1999), understood as an embedded trust where individuals trust one another simply by virtue of being in the same social system, characterizes systems with strong social capital such as the family system. Family identity is often strong (Pearson et al., 2008) and acts as a catalyst for information exchange and cooperation (Pearson et al., 2008). Ties based on generalized trust do not have to be based on frequency of the interaction but are strong through association (Leana and Van Buren, 1999).

Though some families may indeed not hold relationships and will not keep that “sense of identity” or “sense of belonging” and may not be characterized by generalized trust among their members, those that maintain relationships are rich in resilient trust and have Family Social Capital constantly available (Pearson et al., 2008) which can be used for business purposes as an strategic resource (Hoffman et al., 2006, Sorenson and Bierman, 2009). Frequent and close relationships allow an ego and an alter to share higher amounts of knowledge and this is assumed to increase over time in well-established relationships (Tsai and Ghoshal, 1998) as may well be the case in many family ties regardless of their expectations about receiving any benefits in return, at least in terms of obtaining knowledge (Pearson et al., 2008). While family capital is assumed to rely upon contextual beliefs, the sense of belonging, and norms that flow out of family structure and rules, organizational social capital is assumed to be based upon social norms and reciprocate favours (Danes et al.,

2009). Therefore, in the absence of substantial family conflict, family members will act as ‘donors’ in favour of other family members making knowledge available for other family members for generosity, solidarity, and altruism (Bourdieu, 1994) and based on some behavioural norms underlying the family network (Arregle et al., 2007) such as the feeling of obligation (Karra et al., 2006). Even in cases of conflict, some authors have suggested that family social capital plays a crucial role in increasing performance (Kellermanns and Eddleston, 2007). These characteristics substantively reduce the need to hold very high levels of trust, understood in terms of reciprocity commitments (expectations of getting knowledge transfer back) among them to obtain the relational benefits derived of holding family ties. These arguments lead us to the following hypothesis:

**H3: Trust moderates the relationship between the amount of external organizational social capital and performance, to a greater extent than the relationship between the amount of external family social capital and performance.**

## **RESEARCH METHODS**

### **Sample and method**

Our empirical application was carried out in the fishing sector. The study context is given by a group of firms that develop a traditional activity and are located in a limited space, which implies, initially, intense social interactions. For the sake of anonymity, we have not provided to this point, more geographical details. This sector is particularly rich in family firms with many inter-organizational family and non-family ties. All companies are composed of a fishing vessel which operates targeting the same species, which is a high-value species. All firms belong to the same fishery that is they all target the same species. We have surveyed the entire population of this fishery, a total of 132 companies. In general, they are very small

firms with just one owner and several employees (fishermen). In some cases, some of the employees belong to the same family as the owner.

Captains may hold a different number of ties to other firms' captains and share information with them or they may opt for not sharing information with any other firms. The fishing vessels are located in two ports and within each port, firms work geographically very proximate, so that they can hold close relations with each other. Information sharing can be made more or less formal. Some firms have been operating over generations in the fishery and in some cases other members of the family are involved in the same activity but in different firms (uncles, cousins, brothers...) so that these captains have the opportunity to hold familial relations to them and share information with them. As this activity is very linked to a geographical area, the villages around are highly dependent and involved in the fishing business providing a good ground for strong social interactions.

We carried out a serial of surveys to the captains asking them about the specific boats they share knowledge with. In the big majority of the cases, all ties were bidirectional, that is, when captain A recognizes sharing information with other vessels, these vessels also acknowledge holding relations with captain A. Only occasionally, the ties were not bidirectional and we omitted these relations from our study. We could then map a net with all the relations that are hold in the fishery. We found a total of 163 inter-organizational bidirectional ties. We then asked them which (if any) of the relationship were also characterized by holding also family ties, resulting in 65 bidirectional family ties (98 of external ties being non-kin ties). Therefore, we have considered two inter-organizational networks: one composed of ties with alters within the family circle (the family social network) and a second one composed of ties in which ego and alter do not hold any type of kinship, the (non-family) social network. In both of them informants have reported to share

knowledge with the alter. We also gather information about the type of knowledge exchanged and relational characteristics of the firms' relations one by one.

Therefore, we have two types of knowledge sharing networks: the family knowledge network and the non-family knowledge network (which includes the knowledge sharing ties with alters outside the family circle). The benefits and resources provided by the former represent the external family social capital (EFSC) whereas those provided by the latter represent the external (non-family) organizational social capital (EOSC) on performance.

### **Variables and Measures**

In the survey, to measure *external family social capital (EFSN)*, we asked respondents to tell us which firms they share information with and that also hold kinship ties to them. This gave us the family (knowledge sharing) social network. We then calculated the degree of centrality given by the number of family ties the firm holds within the external family social network, that is, with other family members that work within the same activity but in other firms. This represents the amount of EFSC.

To measure *external organizational social capital (EOSC)*, we asked respondents to tell us which firms they share information with among those that did not hold any kinship ties to them. This gave us the non-family (knowledge sharing) social network. We then calculated again the degree centrality given by the number of (non-family) ties the firm holds within the external organizational social network, which represents the amount of EOSC.

To measure *Trust*, we used the Zaheer *et al.* (1998) 6-item scale that has been validated and widely used in the literature measuring the trust the ego place on a certain alter. In the same way, and based also on the previous scale, we measured also the alter's trust in the analysis. The average value of both measures has been considered as an indicator of the common trust within the dyad.



We used an objective measure of *Performance*. We calculated the monthly total value of the catch and then we divided this value for the total amount of days at sea. The resulting figure, known as *value per unit of effort* (VPUE), is of common use among fisheries economist to measure performance. Then this figure was divided by the average of all firm's performance to make it a relative measure of performance with respect to the fleet.

As control variables, we considered for the *engine power of vessels*, measured in horse power, which represents the capital invested in the vessel. More powerful vessels typically get higher catches. We also controlled for the *number of employees*, given by the number of crew members, which represents the human resources involved.

## **EMPIRICAL RESULTS**

Table 2 presents the descriptive statistics of the data used. In Table 3 we present the hierarchical regression results. The amount of External Family Social Capital is highly significant in all models considered providing support to hypothesis 1a. Similarly the amount of External Organizational Social Capital is positively related to firm's performance which is in line with previous literature. We have analysed the interaction effect of the external family social capital (EFSC) and the external (non-family) organizational social capital (EOSC) on performance. In model 4, we can observe that the interaction effect of EFSC and EOSC is positive and significant at the 5% level, which supports hypothesis 2. Therefore, we can conclude that the effect of both types of social capital on performance is positive and that they reinforce each other. To better understand this interaction effect, we have plotted in Figure 1 the interaction effect of both variables. We defined high (low) values of a variable as the mean +1 standard deviation (-1 standard deviation). We can observe that when a firm has a high amount of EOSC, the positive effect of EFSC on performance is reinforced, exerting a stronger positive effect on performance. From the interaction effect we can conclude that

EFSC is of high relevance and is reinforced by other non-family information. Therefore the highest effect on performance would be given by those firms rich in EOSC and in EFSC. Consequently, it can be argued that while family ties have many advantages on performance, this effect is rather mild if firms do not get out from the family circle.

Trust appears significant in many models. However, the moderation effect that trust exerts on the relationship between EFSC and performance does not appear to be significant (Table 3, step 5). This is in line with what we stated in hypothesis 2, that supports the idea that the family social network has some sense of obligation embedded in their ties because of family identity, so that family members do not need expectations of reciprocity to share knowledge between them. On the contrary, trust moderates the relationship between the amount EOSC and performance, though the coefficient is only significant at the 10% level (Table 3, step 5). In case of high relational trust the higher the amount of EOSC, the higher the performance, whereas if trust is low, then the amount of external non-family social capital affects performance to a much lesser extent. We can see more clearly this moderation effect in Figure 2. We can observe that the EOSC hardly exert any influence on performance when the level of trust is low whereas it is much higher when there is high level of trust between both parties.

We can then conclude that OESC is positively related to performance only if there is a certain amount of trust among firms. On the contrary, the effect of the EFSC on performance is positive regardless of the level of trust.

## **DISCUSSION**

We contest that the current depiction of why and in what ways social relations might be productive vehicles for the exchange of knowledge capable of positively affecting organizational performance is oversimplified, because researchers have treated

interorganizational relations equally, when in fact these could be of very different nature. One such substantially different aspect in which we focus is the family aspect: whether these interorganizational relations have a family bonding or not. We find support for our arguments that when interorganizational relations bear a familial characteristic, mechanisms about trust and reciprocity, and what it means to have exchange or social capital bonds between or among family actors are likely to be very different than between two otherwise random unconnected actors. This has implications for the value created through the relation. Three key contributions emerge from the results of the study, as discussed next.

First, our results signal the importance of an overlooked aspect in research in social capital: the familial bonding that inter-organizational relations may hold. As predicted in hypothesis 1, the amount of relationships with family members located in other related but distinct firms, what we refer to as external family social capital (EFSC), is found to have a significant positive effect on firm performance. This result shows that family firms can use their family contacts to connect with other firms to gain the knowledge necessary to stimulate their activities and improve revenue streams that generate profits and growth. Indeed, ties with family members outside the organization but in related firms may have the advantages of strong, high-quality, low-cost ties while at the same time offering (non-redundant) knowledge from outside of the focal firm (Anderson et al., 2005). We therefore extend the work of Arregle and colleagues (2007) and Zahra (2010) advancing a new category of family social capital going beyond the traditionally-defined boundaries of the family firm relations, extending them from the intra- to the inter-organizational context.

Second, we elaborate on the distinction between EFSC and OESC showing that they have distinct yet complementary effects. Our results indicate that EFSC does not provide superior performance than OESC, in line with the literature stream that advocates the importance of bridging ties over bonding ties in creating value through inter-firm knowledge

transfer (e.g., Granovetter, 1973; Tortoriello and Krackhardt, 2010; McEvily and Zaheer, 1999) defending the advantages of knowledge heterogeneity and novelty over redundancy. As we have argued, EFSC is more likely to act as a vehicle of related knowledge that could be somehow redundant when compared with OESC which could give access to more heterogeneous sources of knowledge. However, as predicted in hypothesis 2, the effects of EFSC and OESC show complementarities with their joint effect significantly enhancing firm performance. Thus, we add to extant research by demonstrating that different types of ties can exert complementarities (e.g., Tiwana, 2007) and that firms can extract superior value from their relations by combining a variety of relations.

Third, our results reveal the importance of social identity over other relational mechanisms in extracting value from interorganizational relations, and call for an integration of social identity and social capital theories. As predicted in hypothesis 3, trust positively moderates the relationship between the amount of OESC and performance to a greater extent than the relationship between the amount of EFSC and performance. This result signals that EFSC requires less relational efforts (i.e., trust) to leverage its potential, arguably due to the substitutive effect generated by the family social identity. This finding is important due to the costs embedded in building trust (e.g., Zaheer et al., 1998), which could be reduced by engaging in familial interorganizational relations. It seems that a social capital explanation of how relationships best function to create value is incomplete if social identity among groups of actors is not given consideration. An established social identity appears to heighten the value creating potential of social capital by simplifying the governance of a relationship. We thereby contribute to the further development of both theories by revealing their commonality and intersection in the context of family firms and value creation.

Overall, our study theoretically contributes to social identity and social capital theories demonstrating the importance of combining these theoretical approaches in trying to shed

light on the unique nature of relations between different groups of social actors (for instance, interorganizational relations bearing a familial bonding versus those not bearing such a feature), which affect the distinct means through which value might be created.

## **LIMITATIONS AND FUTURE RESERACH DIRECTIONS**

Despite the strengths of the study research design, arising from having data about all relationships existing within a given group of firms, which gives us the possibility of mapping and taking into account all relationships among these firms and the relational characteristics among them, we should acknowledge its limitations.

Notably, the sample consists of a limited number of firms in Spain from a particular sector. Given that the characteristics of, and benefits from inter-organizational relations may be different in other industry and country settings, future studies using samples drawn from other industries and countries may enhance the generalizability of our findings. More importantly, future studies should explore inter-organizational relations bearing a family aspect between firms operating in distinct industries since our study is restricted to relations within the boundaries of a single industry. Very often, relevant knowledge can and should be accessed from diverse and distant industries in order to build novelty.

We have focused on performance which is a key measure of firm value creation. Still, given the complexity and multidimensionality of firm performance, future researchers would benefit from considering alternative measures based on growth and innovation to complement our findings. Such studies could highlight any trade-offs in performance that firms might encounter when trying to capture value from inter-organizational relations of various natures (e.g. with or without a familial bonding).

While we have controlled for many effects, there are always more variables to consider. For example, we have explored the relative importance of a particular relational

characteristic in extracting value from EFSC and OESC: trust. Future researchers may wish to examine other relational characteristics that could affect the firm ability to extract value from these different inter-organizational relations such as the strength and degree of cognitive cohesion of relational ties.

The role of social identity deserves further analysis and study. Future studies would benefit from measuring and capturing variations in social identity directly and relating it to performance in inter-organizational relations of different nature.

## References.

- Adler, P. S., Kwon, S.W.** (2002). Social Capital: Prospects for a New Concept. *Academy of Management Review*, 27 (1): 17-40
- Anderson, A. R., Jack, S.L., Dodd, S. D.** (2005). The Role of Family Members In Entrepreneurial Networks: Beyond the Boundaries of the Family Firm. *Family Business Review*, Vol.18 (2): 135 - 154
- Arregle, J.L., Hitt, M.A., Sirmon, D. and Very, P.** (2007). The development of organizational social capital: attributes of family firms. *Journal of Management Studies*, 44, 73–96.
- Ashforth, B.E. and Mael, F.** (1989). Social Identity Theory and the Organization. *Academy of Management Review*, 14(1), 20–39.
- Acquaah, M.** (2012). Social networking relationships, firm-specific managerial experience and firm performance in a transition economy: a comparative analysis of family owned and non-family firms. *Strategic Management Journal*, 33, 1215-1228.
- Barney J.** (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1): 99–120.
- Barney, J. B. and M. H. Hansen** (1995). “Trustworthiness as a Source of Competitive Advantage”, *Strategic Management Journal*, 15, Special Issue, 175–190.
- Berger, P. and Luckman, T.** (1967). *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*. London: Penguin.
- Bourdieu, P.** (1994). *Raisons pratiques, Essais*. Paris: éditions du Seuil.

- Bromiley, P. and L. L. Cummings (1995).** “Transaction Costs in Organizations with Trust,” in R. Bies, B. Sheppard, and R. Lewicki (Eds.), *Research on Negotiation in Organizations*, Greenwich, CT: JAI Press.
- Bubolz, M. (2001).** ‘Family as source, user, and builder of social capital’. *Journal of Socio-Economics*, 30: 129–31.
- Burt, R. 1992.** *Structural holes: the social structure of competition*. Cambridge: MA: Harvard University Press.
- Chua, J.H., Chrisman, J.J., & Sharma, P. (1999).** Defining the family business by behavior. *Entrepreneurship Theory and Practice*, 23, 19–39.
- Coleman, J. S. (1990).** *The Foundations of Social-Theory*. The Foundations of Social Theory. Cambridge, MA: Belknap of Harvard UP. pp. 300–318.
- Deephouse, D.L., Jaskiewicz, P. (2013).** Do Family Firms Have Better Reputations than Non-Family Firms? An Integration of Socioemotional Wealth and Social Identity Theories. *Journal of Management Studies*, 50(3), 337–360.
- Fang, R., Chi, L., Chen, M., Baron, R.A. (2015).** Bringing Political Skill into Social Networks: Findings from a Field Study of Entrepreneurs. *Journal of Management Studies*, 52(2), 175–212.
- Granovetter, M. (1973).** The strength of weak ties. *American Journal of Sociology*, 78(6): 1360-1380.
- Gulati, R. (1995).** Does familiarity breed trust? The implications of repeated ties for contractual choices in alliances. *Academy of Management Journal*, 38: 85-112.
- Habbershon, T.G., Williams, M., MacMillan, I. C. (2003).** A unified systems perspective of family firm performance. *Journal of Business Venturing*, vol., 18 (4): 451-465.



- Hamilton, D. L. (Ed.) (1981)** Cognitive processes in stereotyping and intergroup behavior. Hillsdale, NJ: Erlbaum.
- Haynes, K.T., Hitt, M.A., and Campbell, J.T. (2015).** The Dark Side of Leadership: Towards a Mid-Range Theory of Hubris and Greed in Entrepreneurial Contexts. *Journal of Management Studies*, in press.
- Hite JM, Hesterly WS. (2001).** The evolution of firm networks: from emergence to early growth of the firm. *Strategic Management Journal*, 22: 275–286.
- Hoffman, J., Hoelscher, M., Sorenson, R.(2006).** Achieving Sustained Competitive Advantage: A Family Capital Theory, vol.19 (2): 135- 145.
- Hughes, M., Morgan, R.E., Ireland, R.D. & Hughes, P. (2014).** Social Capital and Learning Advantages: A Problem of Absorptive Capacity. *Strategic Entrepreneurship Journal*, 8(3): 214-233.
- Karra, N., Tracey, P., and Phillips, N. (2006).** Altruism and agency in the family firm: Exploring the role of family, kinship, and ethnicity. *Entrepreneurship Theory and Practice*, 30, 861–877.
- Katz, D., & Kahn, R. L. (1978)** The social psychology of organizations (2nd ed.). New York: Wiley.
- Kellermanns, F. W., Eddleston, K. A.(2007).** A family perspective on when conflict benefits family firm performance. *Journal of Business Research*, Vol. 60: 1048–1057.
- Koka, B.R. and Prescott, J.E. 2002.** Strategic alliances as social capital: a multidimensional view. *Strategic Management Journal*, Volume 23, Issue 9, 795–816.

- Kontinen,T., Ojala,A.(2011).** Social capital in relation to the foreign market entry and post-entry operations of family SMEs. *Journal of International Entrepreneurship*, vol.9(2): 133-133
- Leana, C.R., Van Buren, H.J. (1999).** Organizational Social Capital and Employment Practices. *Academy of Management Journal*, 24(3), 538-555.
- McEvily, B., Zaheer, A. (1999).** Bridging ties: A source of firm heterogeneity in competitive capabilities. *Strategic Management Journal*, Vol. 20: 1133-1156.
- McEvily,B., Marcus,A. (2005).** Embedded Ties and the Acquisition of Competitive Capabilities. *Strategic Management Journal*, vol.26: 1033-1055
- Nahapiet,J., Ghoshal, S. (1998).** Social Capital, Intellectual Capital, and the Organizational Advantage. *Academy of Management Review*, 23(2): 242-266
- Patel, P.C., Fiet, J.O.(2011).** Knowledge Combination and the Potential Advantages of Family Firms in Searching for Opportunities. *Entrepreneurship: Theory and Practice*, 35(6): 1179- 1197
- Pearson, A.W., Carr J. C., Shaw, J.C. (2008).**Toward a Theory of Familiness: A Social Capital Perspective. *Entrepreneurship: Theory and Practice*, Vol.27 (4),339-358.
- Pfeffer, J. (1982).** Organizations and Organization Theory. Boston, MA: Pitman.
- Prashantham, S., Dhanaraj, C. (2010).** The Dynamic Influence of Social Capital on the International Growth of New Ventures. *Journal of Management Studies*, 47(6), 967–994.
- Ring, P., Van de Ven, A. (1992).** Structuring cooperative relationships between organizations. *Strategic Management Journal*, 13: 483-498.

- Rodan S, Galunic C. (2004).** More than network structure: how knowledge heterogeneity influences managerial performance and innovativeness. *Strategic Management Journal*, 25(6): 541–562.
- Salvato,C., Melin, L.(2008).** Creating Value Across Generations in Family-Controlled Businesses: The Role of Family Social Capital. *Family Business Review*, vol.21(3): 259-276.
- Sharma, P.(2008).** Commentary: Familiness: Capital stocks and flows between family and business.Vol. 32 (6): 971 - 977
- Sirmon, D.G., Hitt, M. (2003).** Managing Resources: Linking Unique Resources, Management, and Wealth Creation in Family Firms. *Entrepreneurship: Theory and Practice*, Vol.27 (4),339-358
- Sorenson, O., Rivkin J. W., Fleming, L., (2006).** Complexity, networks and knowledge flow. *Research Policy*, 35 (7): 994–1017
- Sorenson,R.L.,Goodpaster,K.E.,Hedberg,P. R., Yu,A. (2009).**The Family Point of View, Family Social Capital, and Firm Performance An Exploratory Test. *Family Business Review*, 22(3): 239- 253
- Soreson R L, Bierna, I. (2009).** Family Capital, Family Business, and Free Enterprise *Family Business Review*, 22 (3): 193-195
- Tagiuri, R., Davis, J. (1996).** Bivalent attributes of the family firm. *Family Business Review*, 9(2), 199-208.
- Tajfel, H. (1978)** The achievement of group differentiation. In H. Tajfel (Ed.), *Differentiation between social groups: Studies in the social psychology of intergroup relations* (pp. 77-98). London: Academic Press.

- Tajfel, H. (1982)** Instrumentality, identity and social comparisons. In H. Tajfel (Ed.), *Social identity and intergroup relations* (pp. 483-507). Cambridge, England: Cambridge University Press.
- Tajfel, H., Billig, M. G., Bundy, R. P. and Flament, C. (1971).** ‘Social categorization and intergroup behaviour’. *European Journal of Social Psychology*, 1, 149–78.
- Tiwana, A. (2008).** Do bridging ties complement strong ties? An empirical examination of alliance ambidexterity. *Strategic Management Journal*, Vol.29 (3): 251–272.
- Tortoriello, M., Krackhard, D. (2010).** Activating cross-boundary knowledge: The role of Simmelian ties in the generation of innovations. *Academy of Management Journal*, vol. 53(1): 167–181.
- Tsai, W., Ghoshal, S. (1998).** Social capital and value creation: the role of intrafirm networks. *Academy of Management Journal*, 41(4): 464-477.
- Turner, J. C. (1985)** Social categorization and the self-concept: A social cognitive theory of group behavior. In E. J. Lawler (Ed.), *Advances in group processes* (Vol. 2, pp. 77-122). Greenwich, CT: JAI Press.
- Turner, J. C., Brown, R. J., Tajfel, H. (1979)** Social comparison and group interest in ingroup favouritism. *European Journal of Social Psychology*, 9, 187-204.
- Uzzi, B. (1997).** Social structure and competition in interfirm networks: The paradox of embeddedness. *Administrative Science Quarterly*, 42: 35-67.
- Yli-Renko, H., Autio, E., Sapienza, H. J. (2001).** ‘Social capital, knowledge acquisition and knowledge exploitation in young technologically based firms’. *Strategic Management Journal*, 22, 587–613.

**Zaheer, A., McEvily, B., Perrone, V. (1998).** Does Trust Matter? Exploring the Effects of Interorganizational and Interpersonal Trust on Performance. *Organization Science*, 9 (2): 141 - 159.

**Zahra, S.A. (2010).** Harvesting Family Firms' Organizational Social Capital: a relational perspective. *Journal of Management Studies*, 47 (2), 345–366.

**Zamudio, C., Sergey A., Kellermanns, F.W (2014).** Network Analysis: A concise review and suggestions for family business research. *Journal of Family Business Strategy*, 5, 63-71.

**Table 1. Two-by-two matrix of social capital classification in family firms.**

<b>Intra-organizational ties</b>	<b>IFSC</b>	<b>IOSC</b>
<b>Inter-organizational ties</b>	<b>EFSC</b>	<b>EOSC</b>
	<b>Kin relations</b>	<b>Non-kin relations</b>

**Table 2. Descriptive statistics**

	<i>Average</i>	<i>St dev</i>	<i>Performance</i>	<i>Capital</i>	<i>Employees</i>	<i>Trust</i>	<i>EFSC</i>	<i>EOSC</i>
<i>Performance</i>	1,000	,483	1					
<i>Capital</i>	52,743	30,406	,393**	1				
<i>Employees</i>	3,508	1,257	,355**	,451**	1			
<i>Trust</i>	4,328	,354	,119	-,154	,010	1		
<i>EFSC</i>	,492	,852	,038	-,138	-,064	-,115	1	
<i>EOSC</i>	,742	,954	,131	,132	,256**	,040	-,266**	1

The first two columns represent the average and standard deviation of the key variables whereas the following ones represent the coefficient of correlation between each two variables.

**Table 3. Hierarchical regression analysis**

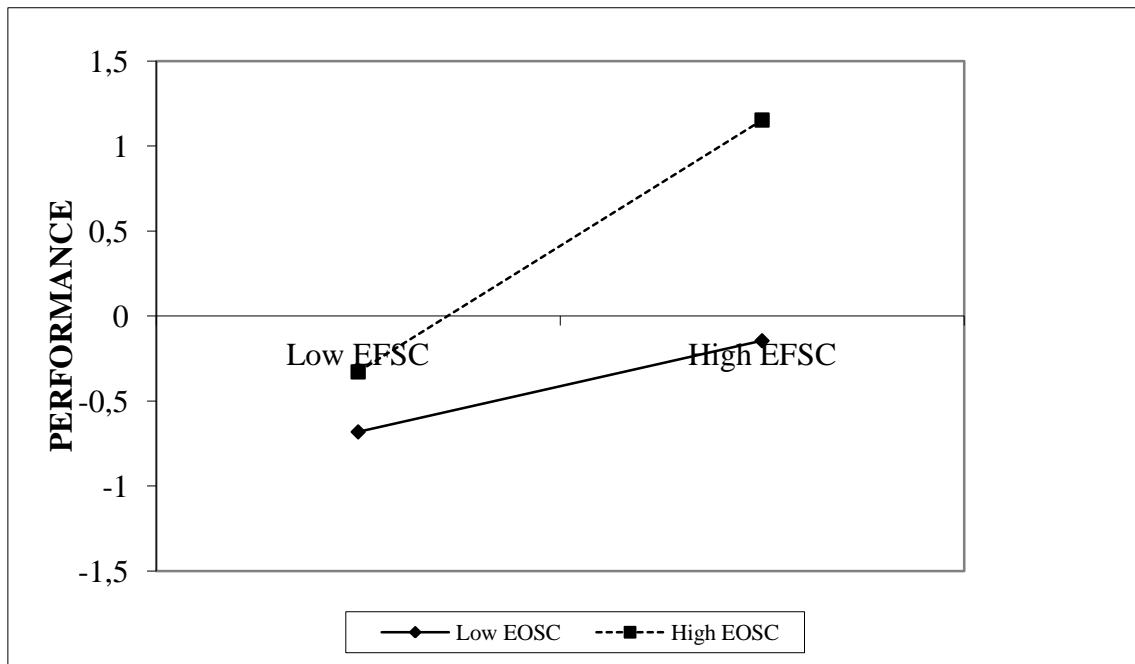
	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6	
	Coeff.	St. Error	Coeff.	St. Error	Coeff.	St. Error	Coeff.	St. Error	Coeff.	St. Error	Coeff.	St. Error
(Constant)		,086		-,080		-1,858		-,733		-1,812		-1,866
<i>Capital</i>	,223	,094 *	,273	2,357 *	,287	2,633 **	,288	2,709 ***	,278	2,495 *	,301	2,794 ***
<i>Employees</i>	,224	,093 *	,214	1,864 †	,164	1,497	,165	1,547	,163	1,477	,199	1,816 †
<i>Trust</i>			,175	1,663	,212	2,127 *	,190	1,947 *	,182	1,476	,291	2,713 ***
<i>EFSC</i>					,383	3,265 ***	,504	3,982 ***	,389	3,272 ***	,353	3,023 ***
<i>EOSC</i>					,359	3,007 ***	,413	3,475 ***	,361	3,003 ***	,311	2,582 *
<i>EFSC*EOSC</i>							,236	2,222 *				
<i>Trust*EFSC</i>									,051	,412		
<i>Trust*EOSC</i>											,199	1,823 †
R square	,157		,187		,310		,354		,311		,340	
Adjusted R sq.	,135		,155		,263		,300		,254		,285	
Change in F	7,096 **		2,765		6,480 **		4,936 *		0,170		3,322 †	

Standardized coefficients are reported; significance levels based on two-tailed *t*-tests or *F*-tests.

†*p* < .10; \**p* < .05; \*\**p* < .01; \*\*\**p* < .001

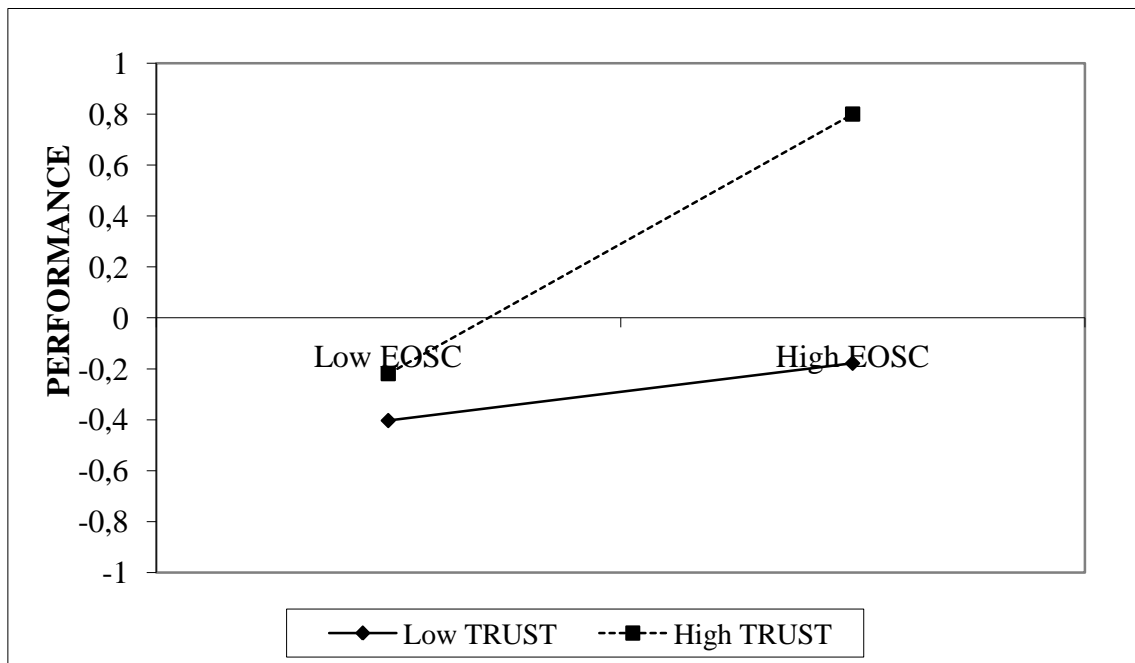


**Figure 1. Interaction effect of EFSC and EOSC**



This figure we have graphed the interaction effect of EOSC and EFSC on performance. The X axis corresponds to the level of EFSC whereas the Y axis corresponds to the standardized level of firm performance

**Figure 2. Interaction effect of EOSC and trust**



In this figure we have graphed the interaction effect of EOSC and TRUST on performance. The X axis corresponds to the level of EOSC whereas the Y axis corresponds to the standardized level of firm performance